

	Score	E
Sequences producing significant alignments:	(bits)	Value
gi 37182518 gb AAQ89061.1 TAAV688 [Homo sapiens]	<u>451</u>	e-125
gi 18088649 gb AAH20905.1 Presenilin stabilization factor	449	e-125 L
<pre>gi 13775224 ref NP_112591.1 presentlin stabilization facto</pre>	447	e-124 L
gi 29243936 ref NP_808251.1 hypothetical protein 4632417K0	<u>391</u>	e-107 L
gi 34864291 ref XP 217185.2 similar to RIKEN cDNA 0610008A	<u>377</u>	e-103 L
gi 21492616 ref NP 080950.1 RIKEN cDNA 0610008A10 [Mus mus	<u> 369</u>	e-101 L
<pre>gi 41056229 ref NP 956409.1 anterior pharynx defective 1B</pre>	284	2e-75 L
gi 34864287 ref XP_343418.1 similar to RIKEN cDNA 0610008A	<u>282</u>	6e-75 L
<pre>gi 14250557 gb AAH08732.1 APH-1A protein [Homo sapiens] >g</pre>	<u> 256</u>	6e-67 L
gi 12654775 gb AAH01230.1 APH-1A protein [Homo sapiens]	254	1e-66 L
gi 37077707 sp Q96BI3 AP1A HUMAN Gamma-secretase subunit AP	<u>254</u>	1e-66 L
<pre>gi 22203751 ref NP 666216.1 anterior pharynx defective 1A</pre>	<u>252</u>	7e-66 L
<pre>gi 34858248 ref XP_345252.1 similar to Aphla-pending prote</pre>	<u>252</u>	9e-66 L
gi 37077149 sp Q8BVF7 AP1A_MOUSE Gamma-secretase subunit AP	<u>251</u>	2e-65 L
<u>gi 7705787 ref NP_057106.1 </u> CGI-78 protein [Homo sapiens] >	248	2e-64 L
<pre>gi 26324468 dbj BAC25988.1 unnamed protein product [Mus mu</pre>	<u>246</u>	5e-64 L
gi 47214485 emb CAG12490.1 unnamed protein product [Tetrao	<u>211</u>	2e-53
<u>gi 48095709 ref XP_392345.1 </u> similar to CG2855-PA [Apis mel	<u>178</u>	1e-43 L
qi 20129183 ref NP 608710.1 CG2855-PA [Drosophila melanoga	<u>164</u>	2e-39 L

gi 26347159 dbj BAC37228.1 unnamed protein product [Mus mu gi 31233667 ref XP 318923.1 ENSANGP00000015809 [Anopheles gi 39580694 emb CAE70374.1 Hypothetical protein CBG16933 [$\frac{162}{158}$	1e-38 L 2e-37 4e-14
gi 17509423 ref NP 492469.1 i-78 protein like, Anterior PH gi 18402667 ref NP 565724.1 expressed protein [Arabidopsis gi 21594204 gb AAM65980.1 unknown [Arabidopsis thaliana] gi 20829201 ref XP 129583.1 similar to CGI-78 protein [Mus	74 70 69 62	6e-12 L 5e-11 1e-10 1e-08
<pre>gi 22024126 ref NP 610786.2 CG8545-PA [Drosophila melanoga gi 32403290 ref XP 322258.1 hypothetical protein [Neurospo gi 9837379 qb AAG00551.1 retinitis pigmentosa GTPase regul</pre>	36 35 35	1.3 1.7 1.7
<pre>qi 46309585 ref NP 908998.1 retrotransposon-like 1 [Mus mu qi 2209198 qb AAB61441.1 LOX6 [Helobdella robusta] qi 32414609 ref XP 327784.1 hypothetical protein [Neurospo</pre>	35 35 35	2.2 L 2.2 2.9
gi 41106711 ref XP 371313.1 similar to dJ14N1.2 (novel S-1 gi 12314268 emb CAC13173.1 dJ14N1.2 (novel S-100/ICaBP typ gi 32423411 ref XP 332143.1 predicted protein [Neurospora gi 46444603 gb EAL03877.1 hypothetical protein CaO19.1574 gi 46126293 ref XP 387700.1 hypothetical protein FG07524.1 gi 46444453 gb EAL03728.1 hypothetical protein CaO19.9147 gi 46228566 gb EAK89436.1 hypothetical protein with possib	35 35 34 34 34 34 34	2.9 2.9 3.8 5.0 5.0 5.0
<pre>qi 41054255 ref NP 956076.1 nuclear autoantigenic sperm pr qi 22328344 ref NP 680595.1 hypothetical protein [Arabidop qi 465445 sp P33485 VNUA PRVKA PROBABLE NUCLEAR ANTIGEN >qi qi 9837383 qb AAG00553.1 retinitis pigmentosa GTPase regul</pre>	33 33 33 33	6.5 6.5 6.5 8.5
$\begin{array}{ll} \underline{\text{qi} \mid 6491868 \mid \text{gb} \mid \text{AAF14051.1} \mid} & \text{myelin transcription factor 1-lik} \\ \underline{\text{gi} \mid 7504867 \mid \text{pir} \mid \mid T23056} & \text{hypothetical protein H06001.2 - Caen} \\ \underline{\text{gi} \mid 23508533 \mid \text{ref} \mid \text{NP} \mid 701202.1 \mid} & \text{hypothetical protein [Plasmodi} \\ \end{array}$	33 33 33	8.5 8.5 8.5
<pre>gi 32563629 ref NP 491994.2 chromo domain and SNF2 related</pre>	_33	8.5 L
gi 42656368 ref XP 039762.5 myelin transcription factor 1 gi 38076711 ref XP 143396.2 similar to dJ14N1.2 (novel S-1	<u>33</u> 33	8.5 L 8.5 L
<u>gi 38076711 ref XP_143396.2 </u> similar to dJ14N1.2 (novel S-1		0.5

Alignments

Deselect all

$\square > gi | 37182518 | gb | AAQ89061.1 |$ TAAV688 [Homo sapiens] $\overline{\text{Length}} = 257$ Score = 451 bits (1159), Expect = e-125Identities = 230/257 (89%), Positives = 230/257 (89%) Frame = +3MTAAVFFGCAFIAFGPALALYVFTIAIEPLRIIFLIAGAXXXXXXXXXXXXXXXXXAARVII 188 Query: 9 MTAAVFFGCAFIAFGPALALYVFTIAIEPLRIIFLIAGA MARVII Sbjct: 1 MTAAVFFGCAFIAFGPALALYVFTIAIEPLRIIFLIAGAFFWLVSLLISSLVWFMARVII 60 Query: 189 DNKDGPTQKYLLIFGAFVSVYIQEMFRFAYYKLLKKASEGLKSINPGETAPSMRLLAYVS 368 DNKDGPTQKYLLIFGAFVSVYIQEMFRFAYYKLLKKASEGLKSINPGETAPSMRLLAYVS Sbjct: 61 DNKDGPTQKYLLIFGAFVSVYIQEMFRFAYYKLLKKASEGLKSINPGETAPSMRLLAYVS 120 Query: 369 GLGFGIMSGVFSFVNTLSDSLGPGTVGIHGDSPQFFLYSAFMTLVIILLHVFWGIVFFDG 548 GLGFGIMSGVFSFVNTLSDSLGPGTVGIHGDSPQFFLYSAFMTLVIILLHVFWGIVFFDG Sbjct: 121 GLGFGIMSGVFSFVNTLSDSLGPGTVGIHGDSPQFFLYSAFMTLVIILLHVFWGIVFFDG 180

Select all

Get selected sequences

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Query: 549 CEKKKWGXXXXXXXXXXXXXXAQTFISSYYGINLASAFIILVLMGTWAFLAAGGSCRSLKL 728
          CEKKKWG
                           SAQTFISSYYGINLASAFIILVLMGTWAFLAAGGSCRSLKL
Sbjct: 181 CEKKKWGILLIVLLTHLLVSAQTFISSYYGINLASAFIILVLMGTWAFLAAGGSCRSLKL 240
Query: 729 CLLCQDKNFLLYNQRSR 779
          CLLCQDKNFLLYNQRSR
Sbjct: 241 CLLCQDKNFLLYNQRSR 257
☐ >qi|18088649|qb|AAH20905.1| ☐ Presenilin stabilization factor-like [Homo sapiens
         Length = 257
 Score = 449 \text{ bits } (1154), \text{ Expect = } e-125
 Identities = 229/257 (89%), Positives = 229/257 (89%)
 Frame = +3
Query: 9
         MTAAVFFGCAFIAFGPALALYVFTIAIEPLRIIFLIAGAXXXXXXXXXXXXXXXXXMARVII 188
          MTAAVFFGCAFIAFGPALALYVFTIA EPLRIIFLIAGA
                                                           MARVII
         MTAAVFFGCAFIAFGPALALYVFTIATEPLRIIFLIAGAFFWLVSLLISSLVWFMARVII 60
Sbjct: 1
Query: 189 DNKDGPTQKYLLIFGAFVSVYIQEMFRFAYYKLLKKASEGLKSINPGETAPSMRLLAYVS 368
          DNKDGPTQKYLLIFGAFVSVYIQEMFRFAYYKLLKKASEGLKSINPGETAPSMRLLAYVS
Sbjct: 61 DNKDGPTQKYLLIFGAFVSVYIQEMFRFAYYKLLKKASEGLKSINPGETAPSMRLLAYVS 120
Query: 369 GLGFGIMSGVFSFVNTLSDSLGPGTVGIHGDSPQFFLYSAFMTLVIILLHVFWGIVFFDG 548
          GLGFGIMSGVFSFVNTLSDSLGPGTVGIHGDSPQFFLYSAFMTLVIILLHVFWGIVFFDG
Sbjct: 121 GLGFGIMSGVFSFVNTLSDSLGPGTVGIHGDSPQFFLYSAFMTLVIILLHVFWGIVFFDG 180
Ouerv: 549 CEKKKWGXXXXXXXXXXXXAQTFISSYYGINLASAFIILVLMGTWAFLAAGGSCRSLKL 728
          CEKKKWG
                           SAQTFISSYYGINLASAFIILVLMGTWAFLAAGGSCRSLKL
Sbjct: 181 CEKKKWGILLIVLLTHLLVSAQTFISSYYGINLASAFIILVLMGTWAFLAAGGSCRSLKL 240
Query: 729 CLLCQDKNFLLYNQRSR 779
          CLLCQDKNFLLYNQRSR
Sbjct: 241 CLLCQDKNFLLYNQRSR 257
Sqi|13775224|ref|NP 112591.1| presenilin stabilization factor-like [Homo sapie
stabilization factor-like)
Length = 257
 Score = 447 \text{ bits (1150)}, Expect = e-124
 Identities = 228/257 (88%), Positives = 229/257 (89%)
Frame = +3
Query: 9
         MTAAVFFGCAFIAFGPALALYVFTIAIEPLRIIFLIAGAXXXXXXXXXXXXXXXXAARVII 188
         MTAAVFFGCAFIAFGPALALYVFTIA EPLRIIFLIAGA
Sbjct: 1
         MTAAVFFGCAFIAFGPALALYVFTIATEPLRIIFLIAGAFFWLVSLLISSLVWFMARVII 60
Query: 189 DNKDGPTQKYLLIFGAFVSVYIQEMFRFAYYKLLKKASEGLKSINPGETAPSMRLLAYVS 368
          DNKDGPTQKYLLIFGAFVSVYI+EMFRFAYYKLLKKASEGLKSINPGETAPSMRLLAYVS
Sbjct: 61 DNKDGPTQKYLLIFGAFVSVYIREMFRFAYYKLLKKASEGLKSINPGETAPSMRLLAYVS 120
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Query: 369 GLGFGIMSGVFSFVNTLSDSLGPGTVGIHGDSPQFFLYSAFMTLVIILLHVFWGIVFFDG 548
          GLGFGIMSGVFSFVNTLSDSLGPGTVGIHGDSPQFFLYSAFMTLVIILLHVFWGIVFFDG
Sbjct: 121 GLGFGIMSGVFSFVNTLSDSLGPGTVGIHGDSPQFFLYSAFMTLVIILLHVFWGIVFFDG 180
Query: 549 CEKKKWGXXXXXXXXXXXXXAQTFISSYYGINLASAFIILVLMGTWAFLAAGGSCRSLKL 728
          CEKKKWG
                            SAQTFISSYYGINLASAFIILVLMGTWAFLAAGGSCRSLKL
Sbjct: 181 CEKKKWGILLIVLLTHLLVSAQTFISSYYGINLASAFIILVLMGTWAFLAAGGSCRSLKL 240
Query: 729 CLLCQDKNFLLYNQRSR 779
          CLLCQDKNFLLYNQRSR
Sbjct: 241 CLLCQDKNFLLYNQRSR 257
gi|37077156|sp|Q8C7N7|AP1B MOUSE
                                 Gamma-secretase subunit APH-1B
 qi|26340556|dbj|BAC33940.1|  unnamed protein product [Mus musculus]
         Length = 257
 Score = 391 \text{ bits } (1004), \text{ Expect} = e-107
 Identities = 194/257 (75%), Positives = 210/257 (81%)
 Frame = +3
Query: 9
          MTAAVFFGCAFIAFGPALALYVFTIAIEPLRIIFLIAGAXXXXXXXXXXXXXXXXXAARVII 188
          MTAAVFFGCAFIAFGPALALYVFTIA +PLR+IFLIAGA
Sbjct: 1
          MTAAVFFGCAFIAFGPALALYVFTIATDPLRVIFLIAGAFFWLVSLLLSSVFWFLVRVIT 60
Query: 189 DNKDGPTQKYLLIFGAFVSVYIQEMFRFAYYKLLKKASEGLKSINPGETAPSMRLLAYVS 368
          DN+DGP Q YLLIFG +SV IQE+FR AYYKLLKKASEGLKSINP ETAPSMRLLAYVS
Sbjct: 61 DNRDGPVQNYLLIFGVLLSVCIQELFRLAYYKLLKKASEGLKSINPEETAPSMRLLAYVS 120
Query: 369 GLGFGIMSGVFSFVNTLSDSLGPGTVGIHGDSPQFFLYSAFMTLVIILLHVFWGIVFFDG 548
          GLGFGIMSGVFSFVNTLS+SLGPGTVGIHGDSPQFFL SAFMTLV+I+LHVFWG+VFFDG
Sbjct: 121 GLGFGIMSGVFSFVNTLSNSLGPGTVGIHGDSPQFFLNSAFMTLVVIMLHVFWGVVFFDG 180
Query: 549 CEKKKWGXXXXXXXXXXXXXXXAQTFISSYYGINLASAFIILVLMGTWAFLAAGGSCRSLKL 728
          CEK KW
                            S QTF+S YY +NL +A+II+VLMG WAF AGGSCRSLKL
Sbjct: 181 CEKNKWYTLLTVLLTHLVVSTQTFLSPYYEVNLVTAYIIMVLMGIWAFYVAGGSCRSLKL 240
Query: 729 CLLCQDKNFLLYNQRSR 779
          CLLCQDK+FLLYNQRSR
Sbjct: 241 CLLCQDKDFLLYNQRSR 257
Length = 257
Score = 377 bits (968), Expect = e-103
 Identities = 189/257 (73%), Positives = 207/257 (80%)
 Frame = +3
Query: 9
          MTAAVFFGCAFIAFGPALALYVFTIAIEPLRIIFLIAGAXXXXXXXXXXXXXXXXXMARVII 188
          MTA VFFGCAFIAFGPALALY+FTIA +PLR+IFLIAGA
Sbjct: 1
         MTAPVFFGCAFIAFGPALALYLFTIATDPLRVIFLIAGAFFWLVSLLLSSVFWFLVRVIT 60
Query: 189 DNKDGPTQKYLLIFGAFVSVYIQEMFRFAYYKLLKKASEGLKSINPGETAPSMRLLAYVS 368
          DN+DGP Q YLLIFG +SV IQE+FR AYY+LLKKASEGLKSINP ETAPSMRLLAYVS
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Sbjct: 61 DNRDGPVQNYLLIFGVLLSVCIQELFRLAYYRLLKKASEGLKSINPEETAPSMRLLAYVS 120
Query: 369 GLGFGIMSGVFSFVNTLSDSLGPGTVGIHGDSPQFFLYSAFMTLVIILLHVFWGIVFFDG 548
         GLGFGIMSGVFSFVNTLS++LGPGTVGIHGDSPQFFL SAFMTLVII+LHVFWGIVFFDG
Sbjct: 121 GLGFGIMSGVFSFVNTLSNALGPGTVGIHGDSPQFFLNSAFMTLVIIMLHVFWGIVFFDG 180
Query: 549 CEKKKWGXXXXXXXXXXXXXXAQTFISSYYGINLASAFIILVLMGTWAFLAAGGSCRSLKL 728
                         S QT +S +Y +NL +A+II+VLMG WAF AGGS RSLKL
Sbjct: 181 CEKNKWYILLTVLLTHLLVSTQTLLSPHYEVNLVTAYIIMVLMGIWAFCVAGGSRRSLKL 240
Query: 729 CLLCQDKNFLLYNQRSR 779
         CLLCQDK+FLLYNQRSR
Sbjct: 241 CLLCQDKDFLLYNQRSR 257
gi|12832198|dbj|BAB22004.1|  unnamed protein product [Mus musculus]
 Length = 258
 Score = 369 \text{ bits } (948), \text{ Expect = } e-101
 Identities = 186/258 (72%), Positives = 204/258 (79%), Gaps = 1/258 (0%)
 Frame = +3
         MTAAVFFGCAFIAFGPALALYVFTIAIEPLRIIFLIAGAXXXXXXXXXXXXXXXMARVII 188
Query: 9
         MT VFFGCAFIAFGPA ALY+FTIA +PLR+IFLIAGA
         MTLPVFFGCAFIAFGPAFALYLFTIATDPLRVIFLIAGAFFWLVSLLLSSMFWFLVRVIT 60
Sbjct: 1
Query: 189 DNKDGPTQKYLLIFGAFVSVYIQEMFRFAYYKLLKKASEGLKSINPGET-APSMRLLAYV 365
              Q YLLIFGA +SV IQE+FR AYYKLLKKASEGLKSINP E APSMRLLAYV
Sbjct: 61 NNRDESVQNYLLIFGALLSVCIQELFRLAYYKLLKKASEGLKSINPEEDIAPSMRLLAYV 120
Query: 366 SGLGFGIMSGVFSFVNTLSDSLGPGTVGIHGDSPQFFLYSAFMTLVIILLHVFWGIVFFD 545
         SGLGFGIMSGVFSFVNTLS+SLGPGTVGIHGDSPQFFL SAFMTLV+I+LHVFWG+VFFD
Sbjct: 121 SGLGFGIMSGVFSFVNTLSNSLGPGTVGIHGDSPQFFLNSAFMTLVVIMLHVFWGVVFFD 180
Query: 546 GCEKKKWGXXXXXXXXXXXXXAQTFISSYYGINLASAFIILVLMGTWAFLAAGGSCRSLK 725
         GCEK KW
                          S QTF+S YY +NL +A+II+VLMG WAF AGGSCRSLK
Sbjct: 181 GCEKNKWYTLLTVLLTHLVVSTQTFLSPYYEVNLVTAYIIMVLMGIWAFYVAGGSCRSLK 240
Query: 726 LCLLCQDKNFLLYNQRSR 779
          CLLCQDK+FLLYNQRSR
Sbjct: 241 FCLLCQDKDFLLYNQRSR 258
Sqi|41056229|ref|NP 956409.1| Lanterior pharynx defective 1B [Danio rerio]
gi|37077309|sp|Q8JHE9|AP1B_BRARE Gamma-secretase subunit Aph-1b (Anterior-pharynx
         1b)
gi|37682171|gb|AAQ98012.1| Lanterior pharynx defective 1B-like [Danio rerio]
gi|47939453|gb|AAH71492.1| Anterior pharynx defective 1B [Danio rerio]
        Length = 258
```

```
Score = 284 \text{ bits } (726), \text{ Expect = } 2e-75
Identities = 147/259 (56%), Positives = 183/259 (70%), Gaps = 2/259 (0%)
Frame = +3
         MTAAVFFGCAFIAFGPALALYVFTIAIEPLRIIFLIAGAXXXXXXXXXXXXXXXXMARVII 188
Query: 9
         MT AVFFGC FIAFGPA+AL++FTIA +PLR+IFLIAGA
Sbjct: 1 MTVAVFFGCTFIAFGPAIALFMFTIARDPLRVIFLIAGAFFWLVSLLLSSLVWFIT-VQI 59
Ouery: 189 DNKDGPTQKY-LLIFGAFVSVYIQEMFRFAYYKLLKKASEGLKSINPGETAP-SMRLLAY 362
          NK+ TQ+ LLIFG +SV +QE FR+ YY+LLKKA+EGL +++ +T P SMR LAY
Sbjct: 60 SNKNSATQQRGLLIFGVVLSVLLQEAFRYGYYRLLKKANEGLLALSQEDTMPISMRQLAY 119
Query: 363 VSGLGFGIMSGVFSFVNTLSDSLGPGTVGIHGDSPQFFLYSAFMTLVIILLHVFWGIVFF 542
         VSGLGFG MSG FS VN LSDSLGPGTVGIHG+S +F+ SAFMTL IILLH+FWG+VFF
Sbjct: 120 VSGLGFGFMSGAFSVVNILSDSLGPGTVGIHGESQHYFISSAFMTLAIILLHMFWGVVFF 179
Query: 543 DGCEKKKWGXXXXXXXXXXXXXXXQTFISSYYGINLASAFIILVLMGTWAFLAAGGSCRSL 722
                           S TF++ +Y +L +IIL +M WA+L AGGS R+L
Sbjct: 180 EACERQRWWALGAVVASHLVVSCLTFVNPHYQGSLIPTYIILSVMAVWAYLCAGGSLRNL 239
Query: 723 KLCLLCQDKNFLLYNQRSR 779
         KLCL C+DK+FLL N R R
Sbjct: 240 KLCLTCKDKDFLLANHRPR 258
Length = 216
Score = 282 \text{ bits } (722), Expect = 6e-75
Identities = 151/257 (58%), Positives = 168/257 (65%)
Frame = +3
Query: 9 MTAAVFFGCAFIAFGPALALYVFTIAIEPLRIIFLIAGAXXXXXXXXXXXXXXXXXMARVII 188
         MTAAVFFGCAFIAFGPAL+LYVFTIA +PLR+IFLIAGA
Sbjct: 1 MTAAVFFGCAFIAFGPALSLYVFTIATDPLRVIFLIAGAFFWLVSLLLSSVFWFLVRVIT 60
Query: 189 DNKDGPTQKYLLIFGAFVSVYIQEMFRFAYYKLLKKASEGLKSINPGETAPSMRLLAYVS 368
         DN+DGP Q YLLIFG +SV IQE+FR AYY+LLKKA+EGLKSINP ETAPSMRLLAY
Sbjct: 61 DNRDGPVQNYLLIFGVLLSVCIQELFRLAYYRLLKKANEGLKSINPEETAPSMRLLAY-- 118
Query: 369 GLGFGIMSGVFSFVNTLSDSLGPGTVGIHGDSPQFFLYSAFMTLVIILLHVFWGIVFFDG 548
                                          AFMTLVII+LHVFWGIVFFDG
Sbjct: 119 -----AFMTLVIIMLHVFWGIVFFDG 139
Query: 549 CEKKKWGXXXXXXXXXXXXXXAQTFISSYYGINLASAFIILVLMGTWAFLAAGGSCRSLKL 728
                         S QT +S +Y +NL +A+II+VLMG WAF AGGS RSLKL
Sbjct: 140 CEKNKWYILLTVLLTHLLVSTQTLLSPHYEVNLVTAYIIMVLMGIWAFCVAGGSRRSLKL 199
Query: 729 CLLCQDKNFLLYNQRSR 779
         CLLCQDK+FLLYNQRSR
Sbjct: 200 CLLCQDKDFLLYNQRSR 216
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```
gi|22761292|dbj|BAC11529.1| unnamed protein product [Homo sapiens]
                            presenilin stabilization factor a [Homo sapiens]
 gi|25989508|gb|AAM61955.1|
 gi|37183020|gb|AAQ89310.1|
                            L GAAV579 [Homo sapiens]
          Length = 247
 Score = 256 \text{ bits } (653), \text{ Expect} = 6e-67
 Identities = 129/247 (52%), Positives = 166/247 (67%), Gaps = 1/247 (0%)
 Frame = +3
Query: 9 MTAAVFFGCAFIAFGPALALYVFTIAIEPLRIIFLIAGAXXXXXXXXXXXXXXXXXXXARVII 188
          M AAVFFGC F+AFGPA AL++ T+A +PLR+I L+AGA
Sbjct: 1 MGAAVFFGCTFVAFGPAFALFLITVAGDPLRVIILVAGAFFWLVSLLLASVVWFILVHVT 60
Query: 189 DNKDGPTQKYLLIFGAFVSVYIQEMFRFAYYKLLKKASEGLKSINPGETAP-SMRLLAYV 365
                Q LLIFGA VSV +QE+FRFAYYKLLKKA EGL S++
                                                         +P S+R +AYV
Sbjct: 61 DRSDARLQYGLLIFGAAVSVLLQEVFRFAYYKLLKKADEGLASLSEDGRSPISIRQMAYV 120
Query: 366 SGLGFGIMSGVFSFVNTLSDSLGPGTVGIHGDSPQFFLYSAFMTLVIILLHVFWGIVFFD 545
           SGL FGI+SGVFS +N L+D+LGPG VGIHGDSP +FL SAF+T IILLH FWG+VFFD
Sbjct: 121 SGLSFGIISGVFSVINILADALGPGVVGIHGDSPYYFLTSAFLTAAIILLHTFWGVVFFD 180
Query: 546 GCEKKKWGXXXXXXXXXXXXXXAQTFISSYYGINLASAFIILVLMGTWAFLAAGGSCRSLK 725
                              S TF++ +Y +L + + V MG WAF+ AGGS RS++
           CE++++
Sbjct: 181 ACERRRYWALGLVVGSHLLTSGLTFLNPWYEASLLPIYAVTVSMGLWAFITAGGSLRSIQ 240
Query: 726 LCLLCQD 746
            LLC+D
Sbjct: 241 RSLLCKD 247
Length = 265
 Score = 254 bits (650), Expect = 1e-66
 Identities = 130/257 (50%), Positives = 170/257 (66%), Gaps = 4/257 (1%)
 Frame = +3
Query: 9
          MTAAVFFGCAFIAFGPALALYVFTIAIEPLRIIFLIAGAXXXXXXXXXXXXXXXXAARVII 188
          M AAVFFGC F+AFGPA AL++ T+A +PLR+I L+AGA
Sbjct: 1 MGAAVFFGCTFVAFGPAFALFLITVAGDPLRVIILVAGAFFWLVSLLLASVVWFILVHVT 60
Query: 189 DNKDGPTQKYLLIFGAFVSVYIQEMFRFAYYKLLKKASEGLKSINPGETAP-SMRLLAYV 365
          D D Q LLIFGA VSV +QE+FRFAYYKLLKKA EGL S++ +P S+R +AYV
Sbjct: 61 DRSDARLQYGLLIFGAAVSVLLQEVFRFAYYKLLKKADEGLASLSEDGRSPISIRQMAYV 120
Query: 366 SGLGFGIMSGVFSFVNTLSDSLGPGTVGIHGDSPQFFLYSAFMTLVIILLHVFWGIVFFD 545
          SGL FGI+SGVFS +N L+D+LGPG VGIHGDSP +FL SAF+T IILLH FWG+VFFD
Sbjct: 121 SGLSFGIISGVFSVINILADALGPGVVGIHGDSPYYFLTSAFLTAAIILLHTFWGVVFFD 180
Query: 546 GCEKKKWGXXXXXXXXXXXXXAQTFISSYYGINLASAFIILVLMGTWAFLAAGGSCRSLK 725
                             S TF++ +Y +L + + V MG WAF+ AGGS RS++
Sbjct: 181 ACERRRYWALGLVVGSHLLTSGLTFLNPWYEASLLPIYAVTVSMGLWAFITAGGSIRSIQ 240
Query: 726 LCLLC---QDKNFLLYN 767
            LLC
                +D
                     ++Y+
Sbjct: 241 RSLLCRRQEDSRVMVYS 257
```

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stabilization factor) (CGI-78) (UNQ579/PRO1141)
presenilin stabilization factor b [Homo sapiens]
gi|25989510|gb|AAM61956.1|
        Length = 265
Score = 254 \text{ bits } (650), \text{ Expect} = 1e-66
Identities = 130/257 (50%), Positives = 170/257 (66%), Gaps = 4/257 (1%)
Frame = +3
         MTAAVFFGCAFIAFGPALALYVFTIAIEPLRIIFLIAGAXXXXXXXXXXXXXXXXXAARVII 188
Query: 9
         M AAVFFGC F+AFGPA AL++ T+A +PLR+I L+AGA
         MGAAVFFGCTFVAFGPAFALFLITVAGDPLRVIILVAGAFFWLVSLLLASVVWFILVHVT 60
Sbjct: 1
Query: 189 DNKDGPTQKYLLIFGAFVSVYIQEMFRFAYYKLLKKASEGLKSINPGETAP-SMRLLAYV 365
              Q LLIFGA VSV +QE+FRFAYYKLLKKA EGL S++ +P S+R +AYV
Sbjct: 61 DRSDARLQYGLLIFGAAVSVLLQEVFRFAYYKLLKKADEGLASLSEDGRSPISIRQMAYV 120
Ouery: 366 SGLGFGIMSGVFSFVNTLSDSLGPGTVGIHGDSPQFFLYSAFMTLVIILLHVFWGIVFFD 545
         SGL FGI+SGVFS +N L+D+LGPG VGIHGDSP +FL SAF+T IILLH FWG+VFFD
Sbjct: 121 SGLSFGIISGVFSVINILADALGPGVVGIHGDSPYYFLTSAFLTAAIILLHTFWGVVFFD 180
Query: 546 GCEKKKWGXXXXXXXXXXXXXAQTFISSYYGINLASAFIILVLMGTWAFLAAGGSCRSLK 725
                          S TF++ +Y +L + + V MG WAF+ AGGS RS++
Sbjct: 181 ACERRRYWALGLVVGSHLLTSGLTFLNPWYEASLLPIYAVTVSMGLWAFITAGGSLRSIQ 240
Query: 726 LCLLC---QDKNFLLYN 767
               +D
           LLC
                   ++Y+
Sbjct: 241 RSLLCRRQEDSRVMVYS 257
☐>gi|22203751|ref|NP 666216.1| ☐ anterior pharynx defective 1A homolog; anterior
         1A homolog (C. elegans) [Mus musculus]
Length = 247
Score = 252 \text{ bits } (644), \text{ Expect} = 7e-66
Identities = 127/247 (51%), Positives = 165/247 (66%), Gaps = 1/247 (0%)
Frame = +3
Query: 9
         MTAAVFFGCAFIAFGPALALYVFTIAIEPLRIIFLIAGAXXXXXXXXXXXXXXXMARVII 188
         M AAVFFGC F+AFGPA +L++ T+A +PLR+I L+AGA
         MGAAVFFGCTFVAFGPAFSLFLITVAGDPLRVIILVAGAFFWLVSLLLASVVWFILVHVT 60
Sbjct: 1
Query: 189 DNKDGPTQKYLLIFGAFVSVYIQEMFRFAYYKLLKKASEGLKSINPGETAP-SMRLLAYV 365
         D D Q LLIFGA VSV +QE+FRFAYYKLLKKA EGL S++ +P S+R +AYV
Sbjct: 61 DRSDARLQYGLLIFGAAVSVLLQEVFRFAYYKLLKKADEGLASLSEDGRSPISIRQMAYV 120
Query: 366 SGLGFGIMSGVFSFVNTLSDSLGPGTVGIHGDSPQFFLYSAFMTLVIILLHVFWGIVFFD 545
         SGL FGI+SGVFS +N L+D+LGPG VGIHGDSP +FL SAF+T IILLH FWG+VFFD
Sbjct: 121 SGLSFGIISGVFSVINILADALGPGVVGIHGDSPYYFLTSAFLTAAIILLHTFWGVVFFD 180
Query: 546 GCEKKKWGXXXXXXXXXXXXXXAQTFISSYYGINLASAFIILVLMGTWAFLAAGGSCRSLK 725
                          S TF++ +Y +L + + V MG WAF+ AGGS RS++
          CE++++
```

```
Query: 726 LCLLCQD 746
            L C+D
Sbjct: 241 RSLSCKD 247
□ >qi|34858248|ref|XP 345252.1|  usimilar to Aphla-pending protein [Rattus norvegi
         Length = 265
 Score = 252 \text{ bits } (643), \text{ Expect} = 9e-66
 Identities = 129/257 (50%), Positives = 169/257 (65%), Gaps = 4/257 (1%)
 Frame = +3
          MTAAVFFGCAFIAFGPALALYVFTIAIEPLRIIFLIAGAXXXXXXXXXXXXXXXXARVII 188
Query: 9
          M AAVFFGC F+AFGPA AL++ T+A +PLR+I L+AGA
Sbjct: 1 MGAAVFFGCTFVAFGPAFALFLITVAGDPLRVIILVAGAFFWLVSLLLASVVWFILVHVT 60
Query: 189 DNKDGPTQKYLLIFGAFVSVYIQEMFRFAYYKLLKKASEGLKSINPGETAP-SMRLLAYV 365
          D D Q LLIFGA VSV +QE+FRFAYYKLLKKA EGL S++
Sbjct: 61 DRSDARLQYGLLIFGAAVSVLLQEVFRFAYYKLLKKADEGLASLSEDGRSPISIRQMAYV 120
Query: 366 SGLGFGIMSGVFSFVNTLSDSLGPGTVGIHGDSPQFFLYSAFMTLVIILLHVFWGIVFFD 545
          SGL FGI+SGVFS +N L+D+LGPG VGIHGDSP +FL SAF+T IILLH FWG+VFFD
Sbjct: 121 SGLSFGIISGVFSVINILADALGPGVVGIHGDSPYYFLTSAFLTAAIILLHTFWGVVFFD 180
Query: 546 GCEKKKWGXXXXXXXXXXXXXAQTFISSYYGINLASAFIILVLMGTWAFLAAGGSCRSLK 725
                             S TF++ +Y +L + + V MG WAF+ AGGS RS++
           CE++++
Sbjct: 181 ACERRRYWALGLVVGSHLLTSGLTFLNPWYEASLLPIYAVTVSMGLWAFVTAGGSLRSIQ 240
Query: 726 LCLLC---QDKNFLLYN 767
            L C +D
                      ++Y+
Sbjct: 241 RSLSCRRQEDSRVMVYS 257
☐ >gi|37077149|sp|Q8BVF7|AP1A·MOUSE ☐ Gamma-secretase subunit APH-1A
Length = 265
 Score = 251 bits (641), Expect = 2e-65
 Identities = 128/257 (49%), Positives = 169/257 (65%), Gaps = 4/257 (1%)
 Frame = +3
Query: 9
         MTAAVFFGCAFIAFGPALALYVFTIAIEPLRIIFLIAGAXXXXXXXXXXXXXXXMARVII 188
          M AAVFFGC F+AFGPA +L++ T+A +PLR+I L+AGA
Sbjct: 1
          MGAAVFFGCTFVAFGPAFSLFLITVAGDPLRVIILVAGAFFWLVSLLLASVVWFILVHVT 60
Query: 189 DNKDGPTQKYLLIFGAFVSVYIQEMFRFAYYKLLKKASEGLKSINPGETAP-SMRLLAYV 365
               Q LLIFGA VSV +QE+FRFAYYKLLKKA EGL S++ +P S+R +AYV
Sbjct: 61 DRSDARLQYGLLIFGAAVSVLLQEVFRFAYYKLLKKADEGLASLSEDGRSPISIRQMAYV 120
Query: 366 SGLGFGIMSGVFSFVNTLSDSLGPGTVGIHGDSPQFFLYSAFMTLVIILLHVFWGIVFFD 545
          SGL FGI+SGVFS +N L+D+LGPG VGIHGDSP +FL SAF+T IILLH FWG+VFFD
Sbjct: 121 SGLSFGIISGVFSVINILADALGPGVVGIHGDSPYYFLTSAFLTAAIILLHTFWGVVFFD 180
Query: 546 GCEKKKWGXXXXXXXXXXXXAQTFISSYYGINLASAFIILVLMGTWAFLAAGGSCRSLK 725
                             S TF++ +Y +L + + V MG WAF+ AGGS RS++
           CE++++
```

Sbjct: 181 ACERRRYWALGLVVGSHLLTSGLTFLNPWYEASLLPIYAVTVSMGLWAFITAGGSLRSIQ 240

```
Query: 726 LCLLC---QDKNFLLYN 767
            L C
                +D ++Y+
Sbjct: 241 RSLSCRRQEDSRVMVYS 257
gi|24637562|gb|AAN63816.1| presenilin stabilization factor [Homo sapiens]
         Length = 251
 Score = 248 \text{ bits } (632), \text{ Expect = } 2e-64
 Identities = 125/240 (52%), Positives = 161/240 (67%), Gaps = 1/240 (0%)
 Frame = +3
Query: 9 MTAAVFFGCAFIAFGPALALYVFTIAIEPLRIIFLIAGAXXXXXXXXXXXXXXXXXAMARVII 188
          M AAVFFGC F+AFGPA AL++ T+A +PLR+I L+AGA
          MGAAVFFGCTFVAFGPAFALFLITVAGDPLRVIILVAGAFFWLVSLLLASVVWFILVHVT 60
Sbjct: 1
Query: 189 DNKDGPTQKYLLIFGAFVSVYIQEMFRFAYYKLLKKASEGLKSINPGETAP-SMRLLAYV 365
          D D Q LLIFGA VSV +QE+FRFAYYKLLKKA EGL S++ +P S+R +AYV
Sbjct: 61 DRSDARLQYGLLIFGAAVSVLLQEVFRFAYYKLLKKADEGLASLSEDGRSPISIRQMAYV 120
Query: 366 SGLGFGIMSGVFSFVNTLSDSLGPGTVGIHGDSPQFFLYSAFMTLVIILLHVFWGIVFFD 545
          SGL FGI+SGVFS +N L+D+LGPG VGIHGDSP +FL SAF+T IILLH FWG+VFFD
Sbjct: 121 SGLSFGIISGVFSVINILADALGPGVVGIHGDSPYYFLTSAFLTAAIILLHTFWGVVFFD 180
Query: 546 GCEKKKWGXXXXXXXXXXXXAQTFISSYYGINLASAFIILVLMGTWAFLAAGGSCRSLK 725
                             S TF++ +Y +L + + V MG WAF+ AGGS RS++
           CE++++
Sbjct: 181 ACERRRYWALGLVVGSHLLTSGLTFLNPWYEASLLPIYAVTVSMGLWAFITAGGSLRSIQ 240
Length = 212
 Score = 246 \text{ bits } (628), \text{ Expect} = 5e-64
 Identities = 126/159 (79%), Positives = 133/159 (83%)
 Frame = +3
          MTAAVFFGCAFIAFGPALALYVFTIAIEPLRIIFLIAGAXXXXXXXXXXXXXXXXAMARVII 188
Query: 9
          MTAAVFFGCAFIAFGPALALYVFTIA +PLR+IFLIAGA
Sbjct: 1 MTAAVFFGCAFIAFGPALALYVFTIATDPLRVIFLIAGAFFWLVSLLLSSVFWFLVRVIT 60
Query: 189 DNKDGPTQKYLLIFGAFVSVYIQEMFRFAYYKLLKKASEGLKSINPGETAPSMRLLAYVS 368
          DN+DGP Q YLLIFG +SV IQE+FR AYYKLLKKASEGLKSINP ETAPSMRLLAYVS
Sbjct: 61 DNRDGPVQNYLLIFGVLLSVCIQELFRLAYYKLLKKASEGLKSINPEETAPSMRLLAYVS 120
Query: 369 GLGFGIMSGVFSFVNTLSDSLGPGTVGIHGDSPQFFLYS 485
          GLGFGIMSGVFSFVNTLS+SLGPGTVGIHGDSPQFFL S
Sbjct: 121 GLGFGIMSGVFSFVNTLSNSLGPGTVGIHGDSPQFFLNS 159
\square > \underline{\text{gi}} | 47214485 | \underline{\text{emb}} | \underline{\text{CAG12490.1}} | unnamed protein product [Tetraodon nigroviridis]
         Length = 217
```

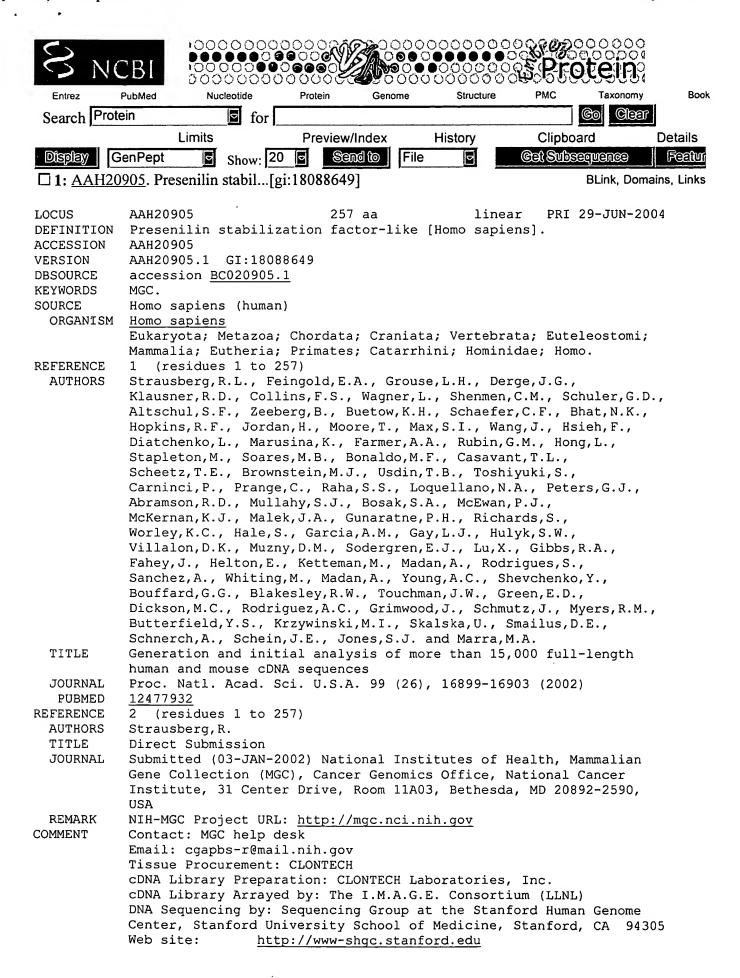
Sbjct: 181 ACERRRYWALGLVVGSHLLTSGLTFLNPWYEASLLPIYAVTVSMGLWAFITAGGSLRSIQ 240

```
Score = 211 bits (536), Expect = 2e-53
Identities = 120/258 (46%), Positives = 145/258 (56%), Gaps = 1/258 (0%)
 Frame = +3
Query: 9 MTAAVFFGCAFIAFGPALALYVFTIAIEPLRIIFLIAGAXXXXXXXXXXXXXXXXXXAARVII 188
         MTAAVFFGC FIAFGPA++L+VFTIA EPLR+IFLIAGA
         MTAAVFFGCTFIAFGPAISLFVFTIAREPLRVIFLIAGAFFWLVSLLLSSLVWFISVOIS 60
Sbjct: 1
Query: 189 DNKDGPTQKYLLIFGAFVSVYIQEMFRFAYYKLLKKASEGLKSINPGETAP-SMRLLAYV 365
                QK LLIFG +SV +QE FRFAYYKLLKKA+EGL +++ ET P S R LAY
Sbjct: 61 DKDSAAQQKGLLIFGVVLSVVLQETFRFAYYKLLKKANEGLLTLSQEETMPISTRQLAY- 119
Query: 366 SGLGFGIMSGVFSFVNTLSDSLGPGTVGIHGDSPQFFLYSAFMTLVIILLHVFWGIVFFD 545
                                             AFMT+ IILLH+FWG+VFFD
Sbjct: 120 -----AFMTMAIILLHMFWGVVFFD 139
Query: 546 GCEKKKWGXXXXXXXXXXXXXAQTFISSYYGINLASAFIILVLMGTWAFLAAGGSCRSLK 725
          CEK++W S TF + Y +L +++L LMG WAF AGGS R+LK
Sbjct: 140 ACEKORWWAVAAVVISHLIVSCLTFQNPSYVASLVPTYVVLFLMGIWAFYTAGGSLRNLK 199
Query: 726 LCLLCQDKNFLLYNQRSR 779
         LCL C+DK+ LL N RSR
Sbjct: 200 LCLTCKDKDLLLANHRSR 217
Length = 238
Score = 178 \text{ bits } (452), \text{ Expect} = 1e-43
Identities = 101/243 (41%), Positives = 131/243 (53%), Gaps = 2/243 (0%)
Frame = +3
Query: 9 MTAAVFFGCAFIAFGPALALYVFTIAIEPLRIIFLIAGAXXXXXXXXXXXXXXXXXMARVII 188
              FFGCAF+AFGP LA++ FT+A EP+RII LIA A
Sbjct: 1 MTVMDFFGCAFLAFGPPLAMFTFTVAAEPIRIIILIASAFFWLISLLLSS------IL 52
Query: 189 DNKDGPTQKYLLIFGAFVSVYIQEMFRFAYYKLLKKASEGLKSINPGETAPSMRLLAYVS 368
              PQ+LFG SV QEFR+Y+L+KAGL+ AS+AYV
Sbjct: 53 WYAVVPLQNHLA-FGLVFSVLFQEAFRYLLYWVLRKAERGLDKVTTTHVADSRHVFAYVC 111
Query: 369 GLGFGIMSGVFSFVNTLSDSLGPGTVGIHGDSPQFFLYSAFMTLVIILLHVFWGIVFFDG 548
         GLGFG MSGVF+ VN L+D++GPGT+G+ + FF+ SA TL ILLH FWG+VFF
Sbjct: 112 GLGFGFMSGVFALVNVLADAVGPGTMGLRQGTEYFFVISAATTLCFILLHTFWGVVFFSA 171
Query: 549 CEKKKWGXXXXXXXXXXXXXAQTF--ISSYYGINLASAFIILVLMGTWAFLAAGGSCRSL 722
           ++K WG S T + Y SA++IL++ AF AGG +S+
Sbjct: 172 LDRKNWGQVIWVVGSHLFVSCMTLLNVKEAYVATTLSAYVILMITTALAFKVAGGRPQSI 231
Query: 723 KLC 731
Sbjct: 232 VQC 234
```

```
gi|15291627|gb|AAK93082.1| LD12037p [Drosophila melanogaster]
gi|24637560|gb|AAN63815.1|
                            presenilin stabilization factor [Drosophila melanogast
         Length = 238
Score = 164 \text{ bits } (415), \text{ Expect = } 2e-39
Identities = 94/248 (37%), Positives = 131/248 (52%), Gaps = 3/248 (1%)
Frame = +3
Query: 9 MTAAVFFGCAFIAFGPALALYVFTIAIEPLRIIFLIAGAXXXXXXXXXXXXXXXXXXXAARVII 188
               FFGC FIAFGP AL+VFTIA +P+RII LIA A
          MTLPEFFGCTFIAFGPPFALFVFTIANDPVRIIILIAAAFFWLLSLLISSLWYALIPL-- 58
Sbjct: 1
Query: 189 DNKDGPTQKYLLIFGAFVSVYIQEMFRFAYYKLLKKASEGLKSI-NPGETAPSMRLLAYV 365
                  K L FG SV QE FR+ Y++L+ +GL ++
Sbjct: 59 -----KEFLAFGVVFSVCFQEAFRYIIYRILRSTEQGLHAVAEDTRVTDNKHILAYV 110
Query: 366 SGLGFGIMSGVFSFVNTLSDSLGPGTVGIHGDSPQFFLYSAFMTLVIILLHVFWGIVFFD 545
          SGLGFGI+SG+F+ VN L+D GPGT+G+ G + FF+ SA
                                                   L IILLH FW ++FF+
Sbjct: 111 SGLGFGIISGMFALVNVLADMSGPGTMGLKGGTELFFVTSAAQALSIILLHTFWSVIFFN 170
Query: 546 GCEKKKWGXXXXXXXXXXXXXAQTFISS--YYGINLASAFIILVLMGTWAFLAAGGSCRS 719
                             S T +++ Y L +++ +L G AF AGG+ RS
            + +
Sbjct: 171 AFDTNNYIHIGYVVFSHLFVSLITLLNANELYTTTLLINYLVTILTGVLAFRVAGGTSRS 230
Query: 720 LKLCLLCQ 743
           + + CQ
Sbjct: 231 FRKFITCQ 238
Length = 152
Score = 162 bits (409), Expect = 1e-38
Identities = 78/152 (51%), Positives = 104/152 (68%), Gaps = 1/152 (0%)
 Frame = +3
Query: 294 KASEGLKSINPGETAP-SMRLLAYVSGLGFGIMSGVFSFVNTLSDSLGPGTVGIHGDSPQ 470
          KA EGL S++ +P S+R +AYVSGL FGI+SGVFS +N L+D+LGPG VGIHGDSP
Sbjct: 1 KADEGLASLSEDGRSPISIRQMAYVSGLSFGIISGVFSVINILADALGPGVVGIHGDSPY 60
Query: 471 FFLYSAFMTLVIILLHVFWGIVFFDGCEKKKWGXXXXXXXXXXXXXAQTFISSYYGINLA 650
          +FL SAF+T IILLH FWG+VFFD CE++++
                                                      S TF++ +Y +L
Sbjct: 61 YFLTSAFLTAAIILLHTFWGVVFFDACERRRYWALGLVVGSHLLTSGLTFLNPWYEASLL 120
Query: 651 SAFIILVLMGTWAFLAAGGSCRSLKLCLLCQD 746
            + + V MG WAF+ AGGS RS++ L C+D
Sbjct: 121 PIYAVTVSMGLWAFITAGGSLRSIQRSLSCKD 152
\square >gi|31233667|ref|XP 318923.1| ENSANGP0000015809 [Anopheles gambiae]
<u>gi|30174614|gb|EAA14158.2|</u> ENSANGP00000015809 [Anopheles gambiae str. PEST]
         Length = 247
 Score = 158 \text{ bits } (399), Expect = 2e-37
 Identities = 93/250 (37%), Positives = 134/250 (53%), Gaps = 5/250 (2%)
 Frame = +3
```

```
Query: 9 MTAAVFFGCAFIAFGPALALYVFTIAIEPLRIIFLIAGAXXXXXXXXXXXXXXXXXXARAVII 188
              FFGC+F+AFGP +A++ TIA +P+RII LIA A
Sbjct: 7 MTVVEFFGCSFLAFGPPVAMFALTIAHDPIRIIILIA-ASFFWLVSLLLSSTVWLAFHPV 65
Query: 189 DNKDGPTOKYLLIFGAFVSVYIQ--EMFRFAYYKLLKKASEGLKSINP-GETAPSMRLLA 359
          +K + FG SV+IQ + FR+ YK+L+K GL+ + A +L+
Sbjct: 66 TSK-----VTFGLICSVFIQVCKRFRYLMYKVLRKTESGLQEVTDIVRIADYRHILS 117
Query: 360 YVSGLGFGIMSGVFSFVNTLSDSLGPGTVGIHGDSPQFFLYSAFMTLVIILLHVFWGIVF 539
          Y SGLGFGI+SG FS VN L+DS+GP TVG+ S F L SA +L +ILLH FW ++F
Sbjct: 118 YASGLGFGIISGAFSLVNILADSVGPATVGLKAASDIFMLISAAQSLAMILLHTFWSVIF 177
Query: 540 FDGCEKKKWGXXXXXXXXXXXXXAQTFI--SSYYGINLASAFIILVLMGTWAFLAAGGSC 713
                              S T + S Y + L ++ ++ + G AF AGG+
          F+ C+ K +
Sbjct: 178 FNACDVKNYYHIGYVVASHLFVSCMTLLNASGLYAVTLLISYTMVCITGAIAFQVAGGTV 237
Query: 714 RSLKLCLLCQ 743
           S + L C+
Sbjct: 238 ASFRKFLTCK 247
\square > gi|39580694|emb|CAE70374.1| Hypothetical protein CBG16933 [Caenorhabditis brigg
         Length = 1387
 Score = 80.9 bits (198), Expect = 4e-14
 Identities = 61/209 (29%), Positives = 96/209 (45%), Gaps = 24/209 (11%)
 Frame = +3
Query: 3
           VAMTAAVFFGCAFIAFGPALALYVFTIAIEPLRIIFLIAGAXXXXXXXXXXXXXXXXAARV 182
           + M + C +F P++AL+ IA +P+RII
                                               G+
Sbjct: 1071 IKMGIVLTVSCYIASFSPSIALFYSFIAHDPVRIILFFLGSFFWLVSLLISSLAWLGLST 1130
Query: 183 IIDNKDGPTQKYLLIFGAFVSVYIQEMFRFAYYKLLKKASEGLK-----SINPG--E 332
           ++ N +L+ G V + QE+ R AY+ LLKKA +GL
Sbjct: 1131 VLPNT-----FLISLG--VCIVAQELSRVAYFMLLKKAQKGLNKITRHGQISVAPGVSD 1182
Query: 333 TAPSMRLLAYVSGLGFGIMSGVFSFVNTLSDSLGPGTVGI------HGDS-----PQ 470
             + +LA V GLG G++S +F +N + GPGT+G+
                                                  H DS
Sbjct: 1183 LHNARHMLALVCGLGMGVISALFYTMNAFATFAGPGTIGLPMALETGHIDSNRAGKYLPL 1242
Query: 471 FFLYSAFMTLVIILLHVFWGIVFFDGCEK 557
            ++ SA +++ L HV W I+ +D C K
Sbjct: 1243 CYVLSA---ILLTLFHVAWTIMVWDTCHK 1268
[Caenorhabditis elegans]
gi|37076812|sp|045876|APH1_CAEEL Gamma-secretase subunit aph-1 (Anterior-pharynx-
          1) (Presentilin enhancer protein 1)
 gi|7508722|pir||T26007 hypothetical protein VF36H2L.1 - Caenorhabditis elegans
 gi|3880371|emb|CAA16282.1| C. elegans APH-1 protein (corresponding sequence VF36H
          [Caenorhabditis elegans]
         Length = 308
Score = 73.6 bits (179), Expect = 6e-12
 Identities = 63/257 (24%), Positives = 105/257 (40%), Gaps = 28/257 (10%)
```

Frame = +3Query: 33 CAFIAFGPALALYVFTIAIEPLRIIFLIAGAXXXXXXXXXXXXXXXXMARVIIDNKDGPTQ 212 C +F P++AL+ IA +P+RII G+ Sbjct: 9 CYIASFSPSIALFCSFIAHDPVRIILFFLGSFFWLVSLLFSSLAWLGLSTVLPDT---- 63 Query: 213 KYLLIFGAFVSVYIQEMFRFAYYKLLKKASEGLK-----SINPG--ETAPSMRLLAY 362 V + QE+ R AY+ LLKKA GL S+ PG + + +LA Sbjct: 64 ---FLLSLTVCIIAQELSRVAYFMLLKKAQRGLNKITRQGQISVAPGVSDLHNARHMLAL 120 Query: 363 VSGLGFGIMSGVFSFVNTLSDSLGPGTVGI------HGDSPQFFLYSAFMTLVII 509 V GLG G++S +F +N + GPGT+G+ + T, Sbjct: 121 VCGLGMGVISALFYTMNAFAIFSGPGTIGLPNALKTGEIDTNRAGKYLPLCYTLSAILLT 180 Query: 510 LLHVFWGIVFFDGCEK--KKWGXXXXXXXXXXXXXAQTFISS----YYGINLASAFIIL 668 L HV W I+ +D C K + TF+SS ++ + A F+IL Sbjct: 181 LFHVTWTIMVWDSCHKIGRIPSAFVPGAAAVVSHLLVTFLSSLNSRGFHVLVFAVQFLIL 240 Query: 669 VLMGTWAFLAAGGSCRS 719 ++ + + GG+ S Sbjct: 241 LICIAYCNVIMGGTISS 257 <u>gi|17381290|gb|AAL36063.1|</u> At2g31440/T28P16.7 [Arabidopsis thaliana] gi|20198156|gb|AAD26475.2| unknown protein [Arabidopsis thaliana] gi|20453379|gb|AAM19928.1| At2q31440/T28P16.7 [Arabidopsis thaliana] Length = 250Score = 70.5 bits (171), Expect = 5e-11Identities = 53/189 (28%), Positives = 86/189 (45%), Gaps = 6/189 (3%) Frame = +3Query: 9 MTAAVFFGCAFIAFGPALALYVFTIAIEPLRIIFLIAGAXXXXXXXXXXXXXXXXXAARVII 188 MT A G A +A GP+L+L+V I+ +P I+ +++ Sbjct: 1 MTVAAGIGYALVALGPSLSLFVSVISRKPFLILTVLSSTLLWLVSLIILSG---LWRPFL 57 Query: 189 DNKDGPTQKYLLIFGAFVSVYIQEMFRFAYYKLLKKASEGLKSINPGETAPSMRL---- 353 Y L+ SV QE RF ++K+ K+ + L S + P + L Sbjct: 58 PLKANVWWPYALL--VITSVCFQEGLRFLFWKVYKRLEDVLDSFADRISRPRLFLTDKLQ 115 Query: 354 LAYVSGLGFGIMSGVFSFVNTLSDSLGPGTVGIHGDSP-QFFLYSAFMTLVIILLHVFWG 530 GLG G+ VF ++ L+ + GP T + S FFL SA + L + +H FSbjct: 116 IALAGGLGHGVAHAVFFCLSLLTPAFGPATFYVERCSKVPFFLISAIIALAFVTIHTFSM 175 Query: 531 IVFFDGCEK 557 ++ F+G K Sbjct: 176 VIAFEGYAK 184 $\square > gi|21594204|gb|AAM65980.1|$ unknown [Arabidopsis thaliana] Length = 250Score = 69.3 bits (168), Expect = 1e-10Identities = 52/189 (27%), Positives = 86/189 (45%), Gaps = 6/189 (3%) Frame = +3



```
Contact: (Dickson, Mark) mcd@paxil.stanford.edu
            Dickson, M., Schmutz, J., Grimwood, J., Rodriquez, A., and Myers,
            R. M.
            Clone distribution: MGC clone distribution information can be found
            through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
            Series: IRAL Plate: 37 Row: f Column: 15
            This clone was selected for full length sequencing because it
            passed the following selection criteria: matched mRNA gi: 13775223.
            Method: conceptual translation.
FEATURES
                     Location/Qualifiers
                     1..257
     source
                     /organism="Homo sapiens"
                     /db xref="taxon:9606"
                     /clone="MGC:24164 IMAGE:4720647"
                     /tissue type="Placenta"
                     /clone lib="NIH MGC 79"
                     /lab host="DH10B"
                     /note="Vector: pDNR-LIB"
     Protein
                     1..257
                     /product="presenilin stabilization factor-like"
     CDS
                     1..257
                     /gene="PSFL"
                     /coded by="BC020905.1:17..790"
                     /db xref="LocusID:83464"
                     /db xref="MIM:607630"
ORIGIN
        1 mtaavffgca fiafgpalal yvftiatepl riifliagaf fwlvslliss lvwfmarvii
       61 dnkdgptqky llifgafvsv yiqemfrfay ykllkkaseg lksinpgeta psmrllayvs
      121 glgfgimsgv fsfvntlsds lgpgtvgihg dspqfflysa fmtlviillh vfwgivffdg
      181 cekkkwgill ivllthllvs aqtfissyyg inlasafiil vlmgtwafla aggscrslkl
      241 cllcqdknfl lynqrsr
//
```

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Jun 8 2004 17:01:12